

A COMPARISON OF THE PURCHASE
DELIBERATION OF U.S. AIR
FORCE PROCUREMENT BUYERS
WHEN BUYING FOR THE AIR
FORCE AND WHEN BUYING
FOR THEMSELVES

By
MICHAEL DEAN SALISBURY
Bachelor of Arts
California State University
Fresno, California
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Thesis Approved:

A handwritten signature in cursive script, appearing to read "W. B. Houston".

Thesis Adviser

A handwritten signature in cursive script, appearing to read "Margaret J. Weber".

A handwritten signature in cursive script, appearing to read "Carl Hall".

A handwritten signature in cursive script, appearing to read "Norman N. Durham".

Dean of the Graduate College

PREFACE

An analysis of the purchase deliberations of U.S. Air Force procurement buyers was conducted to see if there was any difference in the way they buy for the Air Force and the way they buy for themselves. The study was patterned after Dr. Terrell G. Williams' Consumer Decision process. The deliberation phase of that process was selected since it could be applied to the government contracting arena. This study is the first of its kind in assessing consumer behavior within the Department of Defense.

Significant differences were found when comparing what the Air Force buyers do when they buy for the government and what they do when they buy for themselves.

I wish to express my sincere appreciation to all the people who assisted me with this study and with furthering my education at Oklahoma State University.

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CHAPTER I

INTRODUCTION

The United States Air Force and other branches of the armed services (as well as other government agencies) have experienced close scrutiny of purchasing and contracting practices by both internal and external probes. A recent charge by the New York Times that the Air Force paid \$175.00 for its flashlights is one of many recent allegations. Air Force Secretary Verne Orr explained to the news media that, "The Air Force does not pay exorbitant prices for flashlights nor does it squander money on high technology fighter aircraft" ("Secretary Hits Media," 1984 p. 1).

In the Secretary's written response to the New York Times editorial he stated the Air Force pays only \$1.39 for its flashlights, while the \$175.00 lighting device cited in the Times editorial was designed for use in emergency situations. He said

The 'flashlight' discussed is not a flashlight... It was designed for use in emergency situations--situations that our experience tells us can occur... The same item on civilian aircraft typically cost twice the amount ("Secretary Hits Media," 1984 p. 1).

Other examples of the medias' tales of overpriced spare-parts, extravagant cost of navigator's stool caps, and elaborate executive compensations point to an underlying

problem. Not only are spare parts and other related support equipment prices a real problem, but solutions are not as easy as some casual observers seem to think. The Air Force, more than anyone else, is concerned about spare-part prices, even more so than their worst critic. Air Force personnel are determined to improve the integrity of the spares' acquisition process as evidenced by the USAF's own Zero Overprice program that brought the \$916.00 navigator's plastic stool cap procurement to light. It is debatable whether it would be cost effective to try to police the price on every forty-nine-cent item throughout the various spares' packages. In fact,

...taking spares acquisition away from the services and letting the Defense Logistics Agency (DLA) handle it does not appear to be much of a solution, either. DLA's system digested the \$916.00 stool cap procurement in 1981 without a burp. The Air Force's Zero Overprice system caught it in 1983, and that's how DLA first learned of the problem. After all is said and done, though, insiders acknowledge that the Air Force must give the spare parts pricing problem more attention (Smith, 1984, p. 15).

On the other side of this multi-faced problem is what the Air Force pays industry (who sell to the Air Force for profit) for its parts, products, and services. There is sufficient evidence to prove that contractors doing business with the government plot schemes to inflate costs to gouge government funds. In fact, the DOD Inspector General Joseph H. Sherick said,

Criminal investigators have opened 39,000 cases during the past three years. They have referred 17,000 criminal fraud cases for prosecution or administrative action. Military and Federal

Courts have handed down 1300 convictions (Smith, 1984, p. 15).

A recent example of a conviction was National Semiconductor, a major computer chip firm. They pleaded guilty to forty counts of fraud for supplying untested chips to the Department of Defense. The results were that

in two separate agreements, the firm agreed to pay more than \$2 million in fines, restitution and other payments, and to make changes in its management to preclude further problems (Smith, 1984, p. 15).

In yet another case, the Rochester, New York Grand Jury indicted and convicted Jim B. Gandhi and the Gandhi Tool and Precision Corporation on two counts of filing false statements. Gandhi was charged with marketing untested parts for the breeches of 155mm howitzers for the Army. Not only was fraud a problem in this case, but the failure of these parts could result in explosions in the guns' breeches or the possibility of rounds falling short among American troops in wartime (Smith, 1984).

On yet another side of the problem of the overpricing horror stories that have been discussed above, is that there may be a surprise ending, that of the defense contractors not always being the culprits after all. The stage is large and there are many players in the multidimensional and multi-layered buyer-seller relationship. As one of the players in that buyer-seller relationship,

the U.S. military's spare parts contractors are not the only ones to blame for the incredibly high prices the federal government paid for some items. Political posturing and the news media's one-sided reporting have obscured the fact that some faulty

government procurement practices may be at fault (Waters, 1984, p. 74).

Secretary of the Air Force, Verne Orr, stated, "We have long recognized that pricing is an important element in our business relationship with industry and have always regarded it with scrutiny." (Orr, 1983, p. 121).

Secretary Orr is directing the Air Force to concentrate on what they pay for its products and services in five key pricing areas. They are: Should Cost, Management/Production Capability, TECHMOD, Spares, and Industry Pay. He has also directed the Air Force to take a hard look at industries' wage structures. Another area of concern, and the one with which this study was concerned, was how the Air Force buys.

Statement of the Problem

There are many who feel the Air Force and other government agencies are not making the most of their tax dollars. A U.S. News and World Report editorial by Marvin Stone asked, "How good is management in the Pentagon?" He further claimed, "Very bad, according to a host of critics." (Stone, 1983, p. 70). In spite of the criticism, Secretary of Defense Caspar Weinberger (Work, 1983) asked Congress for powers to carry out some of suggestions from the Grace Commission, which contends he could save 92 billion dollars in three years of good management, and he announced a system to prevent enormous overpricing incidents. Secretary Weinberger predicted the spare-parts effort would go the way of the Carlucci initiatives of 1981, which he felt would

revamp the Department Of Defense (DOD) management. At the same time, according to Secretary of the Air Force Verne Orr, the Air Force has become very discriminating in their approach to how they buy systems and parts. He also stated, "The Air Force continues to emphasize some promising ways to buy better and cheaper." (Orr, 1983, p. 125). Two of the many ways to buy better and cheaper are through encouraging competition on buys for complex systems and through dual sourcing, or in other words, having two sources continuously producing a system. As stated above, this study recognizes the need to study how the Air Force buys the supplies and services they require to maintain a strong national defense. The problem this study looked at was how that decision was made.

Purpose of the Study

The purpose of this study was to compare the purchase deliberations of U.S. Air Force procurement buyers to determine if there was any difference in the way they procure goods and services for the Air Force and the way they would buy for themselves. The objectives were:

1. To compare what the Air Force buyers perceive they should do when they buy for the government with what they perceive they should do when they purchase for themselves.
2. To compare what the Air Force buyers do when they buy for the government with what they do when they buy for themselves.

3. To compare what the Air Force buyers do with what they perceive they should do when purchasing for themselves.

4. To compare what the Air Force buyers do with what they perceive they should do when purchasing for the Air Force.

Value of the Study

Previous research conducted has noted the correspondence between household and industrial buying behavior. In his study of family buying decisions, Jagdish Sheth (1974) recognized the similarity between industrial and household buying behavior. However, this study compared the purchase deliberation process of government buying against household buying. To the best knowledge of this author, there has not been a study that parallels the government consumer and the household consumer. This study attempted to add to the body of knowledge of buying behavior and as Colonel William J. Hentges (Director of Contracting and Manufacturing, Tinker Air Force Base, Oklahoma City, Oklahoma) stated in a letter to this author and the Air Force Personnel Center, the study could, "...provide some useful information and insight for us..." (Hentges, 1984).

Scope and Limitations

The study was limited by the following factors:

1. It was limited to civilian employees of the U.S. Air Force who are assigned to the Directorate of Contracting and

Manufacturing, Base Procurement Division, Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma City, Oklahoma.

2. It was further limited to those Civilian employees who volunteered to participate in the study and who remained anonymous. A demographic analysis was not accomplished to further enable participant anonymity. Additionally, the participants were unknown to the researcher. Of the twenty-four employees surveyed, nineteen responded.

The study was limited to that phase of the decision activity known as the deliberation process. It was recognized that this study could not follow the "normal" consumer decision process (Williams, 1982) because of government contracting procedures. (See "Understanding Government Purchasing Procedures", Chapter II of this study.)

Definitions

The following definitions were applied to selected terms and phrases in this study:

Acquisition

The acquiring by contract with appropriated funds for supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated (Government Contract Reports, 1984).

Consumer Decision Process

Consumer decision making is broken into four basic activities. They are in order of occurrence: (1) Problem Perception, (2) Deliberation, (3) Solution, and (4) Post-purchase Review (Williams, 1982). This study dealt only with the deliberation process.

Contracting

Purchasing, renting, leasing, or otherwise obtaining supplies or services from non-federal sources (Government Contract Reports, 1984).

Provides common supplies and services to the military services, other elements of the Defense Department, and to Federal Civil agencies as assigned by the Secretary of Defense ("Selling to the Military," 1983).

Decision Strategies

Decision strategies are categorized as compensatory or noncompensatory. Compensatory decision strategies are when the consumer compares the various attributes of the product and averages them overall to form a summary evaluation. Noncompensatory strategies are based on the assumption that each attribute stands alone, and one cannot compensate for another (Williams, 1982).

Deliberation Process

Decision process activities including: choice criterion;

information relative to problem solving; information acquired, remembered, and applied to making a choice; and as the information is applied, alternative solutions are analyzed and compared against the choice criteria, a decision is made (Williams, 1982).

Federal Acquisition Regulation-FAR

For the reasons set out in the Preamble, Federal legislation implemented the Federal Procurement Policy Act of 1974 which provided the authority for the Federal Acquisition Regulation - FAR. The major intended effects of the FAR are to: produce a clear, understandable document that maximizes feasible uniformity in the acquisition process; reduce the proliferation of agency acquisition regulations; implement recommendations made by the Commission on Government Procurement, the Federal Paperwork Commission, various Congressional groups, and others; and facilitate agency, industry, and public participation in the development and maintenance of the FAR and agency acquisition regulations (Government Contract Reports, 1984).

Should Cost

One of the most promising programs the Air Force has to assure reasonable prices in their large programs (Orr, 1983).

TECHMOD (Technology Modernization)

A way the Air Force ensures the contractors are working at their peak. Basically, the Air Force pays the contractor to develop manufacturing technologies and he invests in capitalizing on the technologies and other modernizations the Air Force identified in the negotiated TECHMOD strategic plan (Orr, 1983).

Zero Overprice Program

A program the Air Force began several years ago that recognized that looking at and touching a spare part by someone who uses it might identify price disconnects. The program prints the item's price on the supply paper work when someone draws it from Base Supply. The resulting price comparison with the item can become very apparent if the price is unusual (Orr, 1983).

CHAPTER II

REVIEW OF LITERATURE

Recent news media coverage and internal Department of Defense (DOD) and Air Force (AF) inquiries have caused a great deal of interest in Air Force acquisitions. In order to comprehend the significance of the perceived problem, it is important to understand and realize the buyer-seller relationship that exists in this arena. The government employee assigned as a purchasing agent or buyer for the Air Force can be viewed from a buyer behavior perspective. These buyers must operate in the market place as both an individual and professional. As a professional, they represent the biggest customer in the world that of the U.S. Government (Superintendent of Documents, 1983). As an individual and a professional, they must understand and have a working knowledge of the Federal Acquisition Regulation (FAR) and all of the codes and Public Laws involved therein. Additionally, they must be able to help the defense industry to do business with them. From all of this comes a defense-industry relationship capable of producing a contract with adequate cost or pricing data. To aid in the comprehension of this relationship, this review of literature will discuss: The deliberation in consumer decision making;

Doing business with the U.S. Government; Understanding Government Purchasing Procedures; and Studies in Government/ Industry Purchasing.

Deliberation in Consumer Decision Making

Williams (1982, p. 25) stated that, "Consumer behavior has been considered by some researchers to be virtually synonymous with consumer decision making." In his book on consumer behavior Dr. Williams broke down the consumer decision process into four major areas. They are: "Problem perception, deliberation, solution, and post-purchase review" (Williams, 1982, p. 27).

There are several activities involved in the deliberation phase of the decision process. Dr. Williams defined them as:

First, some sort of choice criterion is developed for making the decision. Second, information relative to potential problem solutions is sought. Third, information acquired in the search process, along with information derived from past experience and stored in the memory, is processed and applied to making a choice. Finally, as the information is applied, alternative solutions are analyzed and compared against the choice criterion (Williams, 1982, p. 30).

With a little closer look at the four activities listed above, it is obvious that not all deliberations are going to follow the exact pattern nor will there be that clear of a distinction between them. In fact, the "activities of deliberation (information search, information processing, and alternative evaluation) will likely be taking place simultaneously" (Williams, 1982, p. 38).

Given that the government buyer is a consumer for him self when he/she leaves for work in the morning, he/she is still a consumer when at work. The difference is in whom they are buying for. Many studies have highlighted the correspondence between industrial or organizational and household buying behavior (Fern and Brown, 1984). Zaltman and Wallendorf (1979, p. 9) detailed the similarities between consumer behavior and industrial buyer behavior as "The cultural effects on purchase behavior, norms governing purchase behavior, and the influence of others' expectations on purchase behavior." Also,

In the process of making a purchase, each gathers information about alternatives, processes this information, learns about available products, determines which alternative matches the perceived needs most closely, and carries through by making a purchase (Zaltman and Wallendorf, 1979, p. 9).

The Fern and Brown analysis claimed, "That families make group decisions on large or important purchases similarly to organizations" (Fern and Brown, 1984, p. 69).

With the deliberation in consumer decision making on firm and equal ground for both household (private) and organizational (government-implied as organizational) purchases, it is important to understand how an industry does business with the U.S. Government.

Doing Business with the U.S. Government

In essence, there is nothing really new or abnormal in doing business with the Federal Government, the various Defense Organizations or the armed services. Basic

principles and sales management concepts that a business follows in selling within the commercial business field apply in dealing with the Department of the Air Force. Two of the principles that are especially appropriate in establishing and keeping a working relationship with military procurement activities are:

(1) Learn your customer's needs as well as his buying policies and practices, and (2) Follow leads on where buying is done, and search out selling opportunities in all segments of the Defense Organization ("Selling to the Military," 1983, p. 1).

In order to sell to the Department of Defense, a business firm must be capable of identifying the Defense Activity which buy the supplies or services that the business firm offers. The Department of Defense is ready to do business on a competitive basis with competent firms which can supply the products or services needed by various Defense Organizations. The defense purchasing activities are particularly anxious (and required) to establish contacts with small business firms, disadvantaged business firms, and firms in labor surplus areas. Each purchasing activity maintains a listing of all firms which have advised the activity (organization) of their desire to sell their product or service to the activity. The listing is called the bidders mailing list. In order to obtain maximum market opportunities at each Federal activity, the firm seeking business must be listed on that particular installations'/ organizations' bidders list. To enable a firm to identify the Defense activities which might have a need for supplies

or services which are within their capabilities to furnish, the major Defense purchasing activities are identified in the government publication "Selling to the Military", together with a description of the types of items and services they buy. The descriptions are very brief, which requires the potential firm to consider whether the supplies or services to be marketed could be included as part of an item or service listed. The information in the publication should enable a potential firm to identify the various activities which offer the greatest potential for business and how they can get on that activity's bidders mailing list. Additionally, at every Federal buying activity, there is at least one person specifically responsible for counseling and assisting small and disadvantaged businesses in any procurement-related problem with that activity. These personnel are known as Small and Disadvantaged Business Utilization Specialists.

Defense Procurement Information Source

In the publication "Selling to the Military" (1983), they discuss the primary source of information as the "Commerce Business Daily", published by the Department of Commerce. Further, it

...is a valuable source of information to businessmen in identifying products and services which individual procurement offices currently plan to buy. This publication provides information on the following:

--Current Defense Department proposed procurements estimated to exceed \$10,000, and civilian agency procurements expected to exceed \$5,000.

--Recent contract awards, valued in excess of \$100,000 which provide opportunities for subcontracting opportunities.

--Surplus sales information and other information helpful to businessmen who seek to participate in Federal Procurement activities ("Selling to the Military," 1983 p. 2).

Contracting with the U.S. Air Force

Each year the Air Force processes about four million contracting actions from their many bases across the country ("Selling to the United States Air Force," 1981). The bases are assigned to a parent command. Each command or major command has different missions within the Air Force, so in addition to buying the supplies and services required for the daily operation of an Air Force base, (basic supplies and services aligning with this study) some contracting offices buy to support their command's particular mission as assigned by Headquarters, United States Air Force. One of those parent or major commands is the Air Force Logistics Command (AFLC). The worldwide mission of AFLC is to keep the Air Force's Aerospace Weapons Systems in a constant state of combat readiness. To carry out this mission, AFLC purchases spare parts, provides systems overhaul and repair and systems modifications. These purchases are accomplished at five Air Logistics Centers located in Georgia, Texas, California, Utah, and Oklahoma; at the 2750th Air Base Wing at Wright-Patterson Air Force Base in Ohio; and at the Aero-

Space Guidance and Meteorology Center at Newark Air Force Station in Ohio. The Procurement Source System at each Air Logistics Center (ALC) is based upon the use of detailed Commodity Lists which contain those items normally procured by that particular ALC. Each center's Commodity Lists are prepared in detail and are available without charge upon request from the Small and Disadvantaged Business Utilization Specialist. Only the general heading of the Federal Supply Code Class is listed. Table I, for example, lists the Federal Supply Code (FSC) from Oklahoma City Air Logistics Center. Table II lists the required forms to be completed in establishing a potential business firm as an Air Force Supplier.

Qualified Products. Some items bought by the Air Force are termed Qualified Products. Qualified Products are those governed by specifications containing certain standards of performance for which a manufacturer's products must be tested and approved prior to bid opening. Since only products which have been tested and qualified for inclusion on the Qualified Products List (QPL) prior to bid opening are considered for award ("Selling to the United States Air Force," 1981, p. 1-1).

The Department of Defense Index of Specifications and Standards, Chapter IV, identifies the specifications which require products to be tested and qualified. The Defense Standardization Manual (M200) is the basic directive concerning the qualified products and qualifications procedures. For example, the manufacturing process section lists machine shop, metal manufacturing, and other products manu-

TABLE I
OKLAHOMA CITY AIR LOGISTICS CENTER
COMMODITY LIST

FSC	Nomenclature
1420	Guided Missile Components
1560	Airframe Structural Components
1650	Aircraft Hydraulic Vacuum, and De-Icing System Components
1660	Aircraft Air Conditioning, Heating, and Pressuring Equipment
2840	Gas Turbine and Jet Engines, Aircraft and Components
2935	Engine Cooling System Components, Aircraft
2945	Engine Air and Oil Filters, Strainer, and Cleaners, Aircraft
2950	Turbosuperchargers
2995	Miscellaneous Engine Accessories, Aircraft
6605	Navigational Instruments
6610	Flight Instruments
6615	Automatic Pilot Mechanisms and Airborne Gyro Components
6620	Engine Instruments

Source: Selling to the United States Air Force, 1981.

TABLE II
AIR FORCE SUPPLIERS REQUIRED FORMS
(APPLICABLE TO AFLC)

Form	Title/Function
Standard Form 129	Bidder's Mailing List Application Bidder's List Data (Lists commodities a firm is capable of furnishing by National Stock Number (NSN), and nomenclature for each item selected). Bidder's List Application Supplement (completed when additional information is required to supplement the SF 129, the cognizant ALC will furnish the form for completion).
AFLC Form 210	
DD Form 558-1	

Source: Selling to the United States Air Force, 1981.

factured by the type of work or product involved ("Selling to the United States Air Force," 1981).

Small Business Utilization

The Department of Defense has a policy to increase the level of participation by socially and economically disadvantaged small business concerns as prime contractors and subcontractors to the DOD. By DOD definition, socially and economically disadvantaged small business concerns are

any small business concern which is at least 51% owned by one or more socially and economically disadvantaged individuals; or in the case of any publicly-owned business, at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals, and whose management and daily operations are controlled by one or more such individuals. Black Americans, Hispanic Americans, Native Americans, and Asian Pacific Americans are included in this category ("Selling to the Military," 1983, p. 4).

The opportunities available to Small and Disadvantaged Businesses for obtaining a defense subcontract are greater today than ever before. According to Davidson (1984),

with the passage of Public Law 95-507, prime contractors to the federal government are required to submit plans for the utilization of "small" and "small disadvantaged" businesses subsequent to contract award (p. 67).

The DOD developed programs utilized by the Army, Air Force, Navy, and Defense Logistics Agency for small business, and labor surplus areas can be summarized into six basic areas as discussed from the Department of Defense publication titled "Small and Disadvantaged Business Utilization Specialists" (Department of Defense, 1984, p. 1 and

\mathcal{H}_1 is the hypothesis that the signal is present, \mathcal{H}_0 is the hypothesis that the signal is absent. The test statistic is defined as

$$T = \sum_{n=0}^{N-1} y[n] \cos(\omega_0 n)$$

where $y[n]$ is the received signal sample at time n . The test statistic T is compared against a threshold γ to decide between \mathcal{H}_0 and \mathcal{H}_1 . The decision rule is given by

$$T \stackrel{\mathcal{H}_1}{\underset{\mathcal{H}_0}{>}} \gamma$$

where γ is the threshold value. The probability of detection P_D and the probability of false alarm P_{FA} are defined as

$$P_D = \Pr(T > \gamma | \mathcal{H}_1) \quad \text{and} \quad P_{FA} = \Pr(T > \gamma | \mathcal{H}_0)$$

The Neyman-Pearson lemma states that the most powerful test for a given P_{FA} is the likelihood ratio test. The likelihood ratio Λ is defined as

$$\Lambda = \frac{p(y | \mathcal{H}_1)}{p(y | \mathcal{H}_0)}$$

where $p(y | \mathcal{H}_1)$ and $p(y | \mathcal{H}_0)$ are the probability density functions of the received signal y under hypotheses \mathcal{H}_1 and \mathcal{H}_0 , respectively. The likelihood ratio test is given by

$$\Lambda \stackrel{\mathcal{H}_1}{\underset{\mathcal{H}_0}{>}} \eta$$

where η is the threshold value. The probability of detection P_D and the probability of false alarm P_{FA} are related by the Receiver Operating Characteristic (ROC) curve.

The ROC curve is a plot of P_D versus P_{FA} . The area under the ROC curve (AUC) is a measure of the performance of the detector. The AUC is defined as

$$AUC = \int_0^1 P_D(P_{FA}) dP_{FA}$$

where $P_D(P_{FA})$ is the probability of detection as a function of the probability of false alarm. The AUC is a measure of the overall performance of the detector, and it is independent of the threshold value.

$$AUC = \int_0^1 P_D(P_{FA}) dP_{FA}$$

The AUC is a measure of the overall performance of the detector, and it is independent of the threshold value. The AUC is defined as

$$AUC = \int_0^1 P_D(P_{FA}) dP_{FA}$$

The AUC is a measure of the overall performance of the detector, and it is independent of the threshold value. The AUC is defined as

2). These six basic areas are:

Source Identification. Source identification is basically watching for new sources of supply from among the small business arena. Its thrust is in locating those small businesses, small disadvantaged businesses, women-owned businesses, and labor surplus area business firms and assisting them to get listed on the appropriate DOD activities' 'bidders' mailing lists. Soon thereafter, the prospective business will begin receiving Invitations for Bid (IFB) and Requests for Proposals (RFP's) when the activity buys items or services of the type furnished by the prospective business.

Labor Surplus and Small Business Preference. Depending on the situation, the DOD buying activity may set aside procurements, either in whole or part, for competition restricted to labor surplus areas and/or small business concerns. Generally, these set asides are made when there are at least two qualified small or labor surplus area concerns to assure adequate competition.

Small Disadvantaged Business Preference Program (8a). The Small Business Administration (SBA) may enter into contracts with federal agencies and to subcontract performance of those small contracts to small, socially and economically disadvantaged businesses. Section 8(a) of the Small Business Act (as amended) allows the SBA to approve firms for subcontracting to and for the DOD.

Subcontracting. The Department of Defense desires that their prime contractors make every effort possible to use small businesses, small disadvantaged businesses, women-owned small businesses, and labor surplus area firms as subcontractors. In fact, the DOD

inserts a special clause in contracts with large business concerns that meet certain conditions (i.e. dollar value, potential for subcontracting, etc.) which requires the large business primes to establish a plan that is designed to maximize the participation of small and small disadvantaged business concerns as subcontractors (Department of Defense, 1984, p. 2).

These requirements are reviewed periodically by DOD and SBA personnel visits to the contractor's plants.

Procurement Conferences. In order to provide an opportunity for business to meet with procurement specialists from federal military and civilian agencies and federal prime contractors, the DOD holds conferences along with other federal agencies and the business firms desiring to do business with the government. Some of the topics are: federal procurement and contracting processes; aids and services of government to business; and opportunities to sell to federal agencies and prime contractors.

Counseling and Assistance. As discussed earlier, each defense activity's procurement office has the requirement to counsel and assist small businesses, small disadvantaged businesses, small women-owned businesses, and labor surplus area business firms with any problem they may have in understanding procurement regulations and practices,

acquiring pertinent data on present or future DOD procurements, or determining the appropriate buyer/agency for their product, and so forth.

Not only is it essential for the government employee assigned as a buyer to understand government contracting, but the business firm wishing to market their supplies or services to the government must have a degree of expertise. This section has given an overview of doing business with the U.S. government. The purchasing procedures and public laws surrounding this business relationship are critical to an effective business relationship.

Understanding Government Purchasing Procedures

Volumes of training material for the government employee assigned as a buyer have been developed, written, and taught. Likewise, many articles have been written by the business community giving advice and counsel on successfully doing business with the government. The purpose of this section is not to make the reader knowledgeable in government contracting or to succeed in business with the federal government, but rather to highlight areas of concern and limitations facing the government buyers as they operate in the market place as industrial/organizational/government buyers.

The organizational structure of the Oklahoma City Air Logistic Center Directorate of Contracting and Manufacturing's buying activities can be broken into two basic

areas. One being central procurement, dealing with the repair, maintenance, and modification of the systems listed in Table III. The other buying activity is known as base contracting. As previously discussed, this survey will only look at the base contracting buyers for reasons that will be fully discussed in the chapter on Methodology.

TABLE III
OKLAHOMA CITY AIR LOGISTICS CENTER
PRIME SYSTEMS

Aircraft	Missiles	Engines
A-7D	AGM-69A	J-33 Allison
B-52	AGM-86A/B	J-47 General Electric
C-97	AGM-109	J-57 Pratt and Whitney
C-135	DGM-109C	J-75 Pratt and Whitney
E-3A		J-79 General Electric
E-4A		F-101 General Electric
		TF-30 Pratt and Whitney
		TF-33 Pratt and Whitney
		TF-41 Allison/Rolls-Royce
		T-58 General Electric
		T-64 General Electric

Source: Selling to the United States Air Force, 1981.

The base Contracting Division's mission responsibilities include the acquisition of supplies and services, including all phases of contract administration of the Division contracts in support of the ALC base, including nonappropriated

funds activities and Tinker Air Force Base's industrial complex. This Division provides the base contracting support to all co-located or assigned organizations as required by the various Host Tenant Support Agreements. They are also required to acquire supplies, equipment and services for other military installations and/or organizations as directed and assigned. Additionally, they are responsible for the acquisition of repair, non-personal services, utilities, architect-engineering and construction services in support of the ALC and co-located units.

A few more definitions are needed to help the reader through this area of the discussion. These definitions are applicable to the Directorate of Contracting and Manufacturing, Oklahoma City ALC and are summaries from the Directorate's Customer's Guide (1982), and the Government Contract Reports (1984).

Performance Work Statement. This document accurately describes the essential and technical requirements for items, materials, or services including the standards used to determine whether the requirements have been met.

Purchase Order. "Purchase order," as used in this part, means an offer by the Government to buy certain supplies or nonpersonal services and construction from commercial sources, upon specified terms and conditions, the aggregate amount of which does not exceed the small purchase limit. The Optional Form 347, Order for Supplies or Services, is designed for this purpose (Government Contract Reports Sec 13-101, page 42164).

Small Purchases. "Small purchase" means an acquisition of supplies, nonpersonal services, and

construction in the amount of \$10,000 or less for civilian agencies and \$25,000 or less for defense agencies, using the procedures prescribed in this part (Government Contract Reports Sec 13-101, page 42164).

Standards of Conduct. Air Force Regulation 30-30, Air Force Pamphlet 70-1 and the FAR provide standards of conduct that relate to possible conflict between private interests and official duties. The buyers are cautioned that acceptance of gifts or favors will result in criminal prosecution (Government Contract Reports Sec 3.101-1).

Contracting

Basically, there are two forms of acquisition. Formal advertising is the preferred method in which invitations for bid (IFB's) are utilized. This method requires complete, adequate, and clear requirements/specifications to allow acquisition by competitive bids and awards.

Williams (1982, p. 27) stated that "decision making is not a discrete act but rather a sequence of steps." The first activity in the decision process for the consumer is "the problem perception" (Williams, 1982, p. 27). For the household buyer, this problem perception may come from within the family, or from the individual. In organizational/government buying, the requirements/specification of the "problem" must come from outside the buying activity, thus a part of the reasoning for limiting this study of consumer/industrial buying to only that process Williams (1982) defines as deliberation.

Once the buyer receives all of the bids and records them, the bids are publicly opened at a predetermined time. Then the award is made to the responsible bidder whose bid, conforming to the invitation for bids, will be most advantageous to the government, with price and other factors considered.

Acquisition by negotiation is the other method of formal contracting. To the maximum extent practical, negotiated acquisitions are on a competitive basis.

Another contracting procedure is through orders under existing contracts. Sometimes, basic contracts are written establishing firm prices, delivery and conditions. Orders may then be issued against these basic contracts on a unilateral basis by the Air Force, thus eliminating excessive administrative time. Some examples are from organizations previously discussed, for example, the Defense Logistics Agency DLA.

Written orders are utilized for urgent or emergency requirements for both on and off duty requirements. The requirements are normally handled by telephone, if within the small purchase threshold, and then confirmed with the written order. It is not hard to see that the government buyer approaching this situation faces a similar situation in the household buying arena, for example, broken pipes, flat tires, no light bulbs, not enough gasoline for the lawn mower, and so forth.

Purchase Requests

Directorate of Contracting and Manufacturing Customer's Guide explains the purpose of the purchase request (Air Force Form 9) as that being

used by the initiator to convey their requirements for supplies, equipment, or services to the Base Contracting Office and/or to provide certification that funds are available. When funds are cited on the AF Form 9, this indicates that the purchase request is "funded". When funds are not cited on AF Form 9, the request is designated as a "requirements" document. When properly prepared and authenticated, the AF Form 9 authorizes the Base Contracting Office to execute and award contracts on behalf of the United States Government. In this regard, the initiator must ensure that the purchase request is sufficiently detailed to provide a clear, concise description of the item or service being requested (Customer's Guide, 1982, p. 7).

Contract Administration

Once the buyers have determined their course of action (including the deliberation phase of consumer buying) the contract, purchase order, or delivery order is signed by the contracting officer (PCO) and distributed, the 'contract' becomes the responsibility of the Contract Administration Section to manage (Customer's Guide, 1982). Thus the government buyer may or may not be directly involved in Williams (1982) last activity, that of post purchase review.

Studies in Government/Industry Purchasing

A recent review of Government Reports Announcements and Index (which lists government studies, research projects, and government grants) was conducted to determine if any

research had been done concerning government buyers behavior in relation to household buying. The results of that search were negative. Additionally, a computer review of other theses and doctoral studies back to 1950 proved no similar studies had been accomplished. Gensch (1984) reviewed two industrial related studies in his article. The first was a 1970 industrial source (supplier) loyalty study concerning the purchase of inexpensive electronic components by organizational buyers. That study claimed to have

found empirical evidence that supplier loyalty exists using primarily organizational variables, attitudes, price, and work simplification variables (Gensch, 1984, p. 42).

Gensch claimed, "an analogous concept to brand loyalty in the field of industrial marketing is 'supplier loyalty', implying the strength of preference for a particular supplier" (Gensch, 1984, p. 42). In the other study, which was really a review of many recent studies from various sources and ranging in time from 1972 to 1981, conducted by Yoram Wind, he stated that the Wind study found that

Surprisingly, despite the numerous academic and commercial organizational buying behavior studies, one can draw very few substantive generalizations as to which variables would have what effect under what conditions. Given the complexity of obtaining and aggregating meaningful measurements of each buyer organization's structure and interactions, considerably more research must be done before practical applications predicting relative strength of preference or market shares for a set of suppliers is a function of organizational variables can be expected (Gensch, 1984, p. 42).

Thus, the purpose of this study is borne somewhat in that this is the first attempt to study the variables in a

government organization buying activity.

CHAPTER III

METHODOLOGY AND PROCEDURE

The purpose of the study was to compare the purchase deliberation of U.S. Air Force procurement buyers to determine if there was any difference in the way they procure supplies and services for the Air Force and the way they buy for themselves. The procedures and methodology used in the study are discussed under the following sections: Type of Research, Population and Sample, Development of the Instrument, Data Collection, Analysis of Data, and Summary.

Type of Research

In his general overview of descriptive studies, Van Dalen (1979) discussed the various surveys, studies, and statements about the relationships between variables that approach the level of the explanatory hypotheses found in experimental research. He stated that in status descriptive surveys,

investigators do not try to relate one variable to another. They merely search for accurate information about the characteristics of particular subjects (Ss), groups, institutions, or situations or about the frequency with which something occurs (p. 285).

Van Dalen (1979) also differentiated between experimental designs and explanatory descriptive designs. He stated that

in explanatory descriptive studies

investigators do not manipulate X and then observe what happens to Y, as experimenters do. In situations where X has already occurred or is not amenable to direct manipulation, investigators must employ a different cause-effect analysis strategy: a descriptive research design. They hypothesize that X is presumably the cause of the occurrence of Y, and then observe naturally occurring instances of exposure and nonexposure to X to determine whether the data confirm their hypothesis (p. 285).

An explanatory descriptive research design was chosen because the study was conducted to compare the individual's purchase deliberation for government and household buying. Because the decision process and especially the deliberation phase of that process is a mental activity, an opinion type survey was used. In the review of literature, the correspondence between household and industrial/organizational buying by the same consumer was discussed. The research methodology utilized by Gensch (1984), for example, also used questionnaires to rate the attributes of products and services. The status descriptive method of research readily adapts itself to this type of investigation.

Population and Sample

Tinker AFB was chosen for this study because of the relative ease of access to the target population, technical advisors, and research documents. Additionally, the steps required in obtaining approval to conduct a research project within a government organization was grueling and often frustrating at best. Having relatively easy access to the approving agency lessened the task at hand.

The target population for this study was selected from the Tinker Air Force Base procurement personnel assigned to the Base Procurement Division of the Directorate of Contracting and Manufacturing. Certain needs of Tinker Air Force Base are met by this division as described in the review of literature. These needs and purchases are generally for small quantities of items, or for specific services needed by the base. For the most part, these purchases are made from sources in and around Oklahoma City or the State of Oklahoma. Further, it was decided that not everyone would purchase a wiring harness for a B-52 bomber, or other defense related materiel, therefore personnel assigned to the central contracting divisions of the directorate were not surveyed. The base procurement division population was further limited to those buyers who procure supplies and services for the Air Force that are most common to everyone who has made some type of similar "household" purchase, for example: paint, nails, tools, furniture, clothing, food, fertilizers, light bulbs, tissue, and so forth. The unit cost of these commodity type items further limited the buyer population to those who bought in the range of \$0.01 to \$999.00 per item. A total of twenty-four respondents remained eligible and were surveyed. Thus, these twenty-four buyers were the ones who operated in the small purchase arena and approximated the same buying plane as household buyers.

Development of the Instrument

The instrument used for the study was developed by the researcher with the idea in mind of comparing the opinion the individual consumer has in four areas of the consumer deliberation process. The four purchase deliberation areas under study stemmed from:

1. How they buy for themselves
2. How they perceive they should buy for themselves
3. How they buy for the government (U.S. Air Force)
4. How they perceive they should buy for the government (U.S. Air Force)

There were ten root or base questions developed for each of the four areas in the Likert-type scale and form. The questions were designed to obtain information patterned after the Williams (1982) Consumer Decision Model. From his consumer decision model, and as discussed in the review of literature, the components of the decision process are problem perception, deliberation, solution, and post-purchase review (Williams, 1982). The ten questions were drafted from the discussion and breakdown of the deliberation activity. Only one question on choice criteria was asked because in government buying much of the basic criteria is detailed on the purchase request or specifications from the requesting government activity to the buyer.

The first six questions of the basic ten dealt with obtaining opinions about choice criteria information search, the degree of the information search, the sources of infor-

mation affecting the purchase, and the types of information sought and used. The last four of the basic questions were designed to obtain the respondents opinion about information processing, alternative analysis, and the extent of alternative evaluation.

Once these root or base questions were developed, it was determined that they would lead the buyer through the search for and processing of information relevant to potentially viable alternatives before making the final decision to buy. Next, the ten root questions were phrased to obtain opinions from the respondents on their deliberation activities when they bought for themselves. After those ten questions were set into area one described above, a duplicate set was reworked to obtain opinions on their perceptions when buying for themselves.

To obtain information on how they bought for the government, the researcher set the root questions against some buying assumptions for Air Force purchases. The goal of the assumptions were to approximate the same level or plane of deliberation used in private or household purchases. The five assumptions for government buying, while not perfect, were a conscientious attempt to clear the way for a relatively simple purchase or contracting procedure. The five assumptions were:

1. To give the buyer the authority to buy "or equal" products/services.
2. To eliminate some contracting requirements and limit

the target group to those who buy similar "household" items, the buy was set for products or services whose value is from \$0.01 to \$999.99 per item.

3. To tell the buyer that they were buying under normal procurement actions.

4. To inform the buyer that funding was available, thus eliminating a "requirements" type situation.

5. To allow the buyer any avenue he/she wanted to use in obtaining business quotations, for example, they could assume verbal or mailout procedures were allowed.

The words in the root questions were changed to the Air Force contracting vernacular aimed at how they bought for the Air Force (area three).

The last area, how they perceived they should buy for the Air Force was developed from the reworking of the questions from area three. The final twist of the questionnaire was to take the questions from areas one and two and mix them together at random and renumber them so it was difficult to determine any pattern or research quest. The same procedure was followed for the government buying (areas three and four) questions. The last step in the development of the instrument was validation. Once developed, the instrument was reviewed by the Chief of the Manufacturing and Contract Administration Division and the Chief of the Planning and Technical Support Branch. After a few minor changes, the Director of Contracting and Manufacturing reviewed the questionnaire. After a change in the respon-

dents' selection to the government buying portion of the survey, Col. Hentges approved the research. The next step in the questionnaire validation process was the re-test. Three buyers from the central procurement division of Weapon Systems and Major Equipment responded to the survey. The comments and results from the pre-test certified that the questionnaire was a viable instrument to meet the objectives of this study. The sample population was not a part of the research. An example of the instrument is included in the Appendix.

Data Collection

The data collection process began when the researcher distributed the survey to each work section. In an effort to determine which work sections response rate was slow or non-responsive, each survey was numbered and assigned to a particular work section. Random distribution within the work sections was accomplished to further ensure participant anonymity. The survey was accompanied by an introduction letter and postage paid return envelope. An eight day suspense was given to return the completed surveys.

The researcher returned to the work sections 5 days later to ask the sections supervisors to request the non-respondents to mail their questionnaire in. The request was given in a generic manner during the next scheduled section meeting. Due to the sensitivity of this topic, no effort was made to identify which of the twenty-four subjects had

not responded. Of primary concern to the researcher, the supervisors, and the target population was to, as much as possible, insure complete participant anonymity. No further follow-up was made. Of the twenty-four surveys distributed, nineteen were returned, for a response rate of 79%.

Analysis Of Data

The analysis of the data was computed from the frequency count (absolute limits) from the categories in private buying of: strongly disagree, somewhat disagree, neither agree or disagree, somewhat agree, and strongly agree. The choices for government purchasing were: not buyer's prerogative, strongly disagree, somewhat disagree, neither agree or disagree, somewhat agree and strongly agree. Descriptive statistics were utilized. Specifically, the frequency of the responses matched a numeric score as shown in the Appendix. The score data was tabulated, and as the next chapter details, plugged into the t-test formula for correlated means. The survey was within groups with one independent variable (buying) and two levels of that independent variable government buying and private buying. There were four different major area t-tests run (see Objectives). There were ten t-tests run per major area.

Summary

The explanatory descriptive research design was discussed as the methodology used in this study. The popula-

tion was limited to twenty-four government employees assigned to the Base Procurement Division of the Directorate of Contracting and Manufacturing at Tinker Air Force Base. The instrument was patterned after the Likert-type scale and form. The data was collected from those respondents who were given a survey, completed it, and mailed it back to the researcher. The overall response rate was computed to be 79% of the target population. Data analysis was computed utilizing descriptive statistics.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This study was concerned with discovering insights and developing information on Air Force procurement buyers' purchase deliberations. The four buyer purchase deliberation categories studied were: (1) how they perceive they buy for themselves versus how they perceive they buy for the government; (2) how they actually buy for themselves versus how they actually buy for the government; (3) how they actually buy for themselves versus how they perceive they buy for themselves; and (4) how they actually buy for the government versus how they perceive they buy for the government. This chapter presents an analysis of respondent opinions of the consumer deliberation process in the areas of: information search, degree of information search, information source processing, and alternative analysis.

A total of twenty questions were asked in each major category as described in the last chapter under development of the instrument. Each of the frequency responses per question matched a numeric score. The twenty questions were paired and a t-test was run on each set of paired questions. Next, an overall t-test was run to determine if there was

any significant difference from the areas compared. This score data was entered on tables to match the four buyer deliberation categories listed above. Finally, a description of the significant data is given.

Comparison 1 - Government Buying Perceptions vs Personal Buying Perceptions

The purpose of this comparison was to determine if there was any difference in the way government buyers perceive the way they buy for themselves was any different than the way they perceive the way they buy for the government. Table IV is a summary of the data from the respondents opinions on the consumer deliberation process in this area. Although there was not an overall significant difference in this comparison, there were two pairs of questions within this category that showed a significant difference between personal and government buying perceptions.

The first pair of questions dealt with the search for information before a purchase. The mean score of 3.562 for government buying perception indicated that if they had a priority and expensive buy for the government, but little time to compare, this sample somewhat agreed that they should not only rely on brand, vendor quality, past experience, and other factors, but should take some time to search for new information and/or fact finding. On the other hand, the mean score of 2.368 for personal buying perceptions indicated that if they had an important and expensive buy

TABLE IV
COMPARISON 1 - GOVERNMENT BUYING PERCEPTION
VS PERSONAL BUYING PERCEPTION

QUESTION	GOVERNMENT		PERSONAL		T-TEST
	\bar{X}	S. D.	\bar{X}	S. D.	
Choice Criteria	4.125	1.024	4.052	0.705	0.246
Information Search	3.562	1.412	2.368	1.382	2.519 *
Degree of Information Search	3.333	1.234	3.631	1.011	0.774
Personality Factors	3.705	1.159	3.789	1.031	0.228
Personal Information Sources	3.526	1.306	3.157	1.067	0.951
Market Controlled Information	3.500	1.339	3.526	0.964	0.068
Compensatory Information Processing	3.666	1.496	3.631	1.011	0.081
Non-compensatory Information Processing	2.500	1.344	3.777	0.942	3.160 *
Alternative Evaluation-Product Familiarity	3.444	1.247	3.722	0.894	0.767
Alternative Evaluation-Number of Alternatives	3.722	1.319	3.722	1.227	0.00
Total T-test For Correlated Means (N=19)	30.789	9.542	34.789	6.205	1.531

* Significant at the .05 level.

for themselves, but little time to compare, they somewhat agreed that they should rely on brand, past experiences, store quality, and other factors, and not have sought new information or have done some fact finding.

The other pair of questions dealt with product information processing. The mean score of 2.500 for government buying perceptions indicated the buyers somewhat disagreed with the statement that before they made their decision to buy, they should consider each of the products features independently, and the product with the best individual feature would finally be selected. The mean score of 3.777 for personal buying perceptions (or how they perceive they buy for themselves) indicated that before they made their decision to buy for themselves they would: consider each of the products features independently, then, the product with the best individual feature would be selected. The t-score of 3.160 for this pairing shows there was a significant difference in their government buying perception versus their personal buying perceptions in this area of product information processing. Overall, the t-score of 1.531 for this comparison shows that the difference between the ten paired questions was not significant at the .05 level, therefore, it can be concluded, that there was no difference between government and personal buying perceptions.

Comparison 2 - Actual Personal Buying vs Actual Government Buying

The twenty questions were compared in this area to determine if there was any difference in the way procurement buyers actually buy for themselves and in the way they actually buy for the government. Table V lists the question, the mean, standard deviation, and the t-test values. As the table indicates, there was an overall significant difference (at the .05 level) in the way procurement buyers bought for themselves and in the way they bought for government.

Within this comparison, one of the paired questions also proved to be significant. The participants were asked what effect advertisements from radio, television, newspapers, magazines, sales personnel, advertising brochures, and sales promotions had on their purchase decision. When buying for the government, the mean score was 3.666, an indication that the respondents agreed that advertising had little effect on their purchase decision. The frequency count (see the Appendix) also supported this finding as 61% of the respondents indicated that advertising had little effect on their purchase decision. However, when buying for themselves, the mean score of 2.578 indicated that advertising had an effect on their purchase decisions. The frequency count also supported this finding as 63% of the respondents agreed that advertising had an effect on their purchase decision. The t-score of 2.298 showed a significant difference existed in this comparison.

TABLE V
COMPARISON 2 - ACTUAL GOVERNMENT BUYING
VS ACTUAL PERSONAL BUYING

QUESTION	GOVERNMENT		PERSONAL		T-TEST
	\bar{X}	S. D.	\bar{X}	S. D.	
Choice Criteria	3.941	1.197	4.368	0.597	1.330
Information Search	4.000	1.105	4.055	1.109	0.152
Degree of Information Search	3.400	1.183	3.421	0.837	0.060
Personality Factors	3.588	1.003	3.947	1.223	0.955
Personal Information Sources	3.052	1.508	3.578	1.017	1.261
Market Controlled Information	3.666	1.137	2.578	1.121	2.928 *
Compensatory Information Processing	3.466	1.407	4.263	0.805	1.953
Non-compensatory Information Processing	2.886	1.355	3.500	0.985	1.552
Alternative Evaluation-Product Familiarity	3.111	1.323	2.736	0.933	0.998
Alternative Evaluation-Number of Alternatives	3.125	1.024	3.263	0.805	0.446
Total T-test For Correlated Means (N=19)	30.526	8.181	35.315	4.784	2.202 *
* Significant at the .05 level.					

Although not significantly different, but noteworthy, was the question concerning compensatory information processing. When buying for the government the mean score of 3.466 indicated that the buyers were leaning towards agreeing that before making a decision to obligate government funds, they considered all of the products features and averaged the overall attributes to reach their final decision. The frequency count indicated that eight buyers felt that way, two neither agreed or disagreed, five did not feel that way, and four buyers indicated they did not have any choice in the decision. On the same question, when buying for themselves, the mean score of 4.263 indicated they were in a much stronger agreement that before buying for themselves, they considered all of the products features and then averaged the overall attributes to reach their final purchase decision. A look at the frequency count showed that the large majority (17) felt that way, where as only two did not.

Comparison 3 - Actual Personal Buying vs Personal Buying Perceptions

The ten paired questions in this area were given to determine if there was any difference in the way government buyers actually buy for themselves versus their perceptions when buying for themselves. Table VI is a summary of the data from the participants taking part in this study. Although there was not an overall significant difference in

this comparison, there were three paired questions that were noteworthy.

The first set of paired questions dealt with the search for information before a purchase. The mean score of 2.368 for personal buying perceptions indicated that if they had an important and expensive buy for themselves, but little time to compare, they somewhat agreed that they should rely on brand, past experience, store quality, and other factors, and not seek new information or do some fact finding. When actually buying, the mean score of 4.055 indicated just the opposite, as would be expected, as this question was worded just the opposite on the questionnaire. In effect, there really was not a difference.

In response to the paired questions concerning the market controlled source of information, the mean score of 3.526 for personal buying perceptions denoted the respondents tended to agree somewhat that advertisements from radio, television, newspapers, magazines, sales personnel, advertising brochures, and sales promotions (free samples) should help with their purchase decision. Conversely, the mean score of 2.578 signified that when they actually bought, they tended to neither agree or disagree that market controlled information affected their purchase decision. The t-score of 2.792 certified that there was a significant difference between the paired questions and there would be less of an advertising effect on their actual buying.

The third set of paired questions from this area apply

to compensatory information processing. The mean score of 3.631 for personal buying perceptions affirmed the participants perception that before they made a decision to buy they somewhat agreed to consider all of the products features and averaged these together for the overall attributes of the product to reach their final decision. However, the mean score of 4.26 indicated that, when they actually bought they were much more inclined to consider all of the products features and averaged them together for the overall attributes of the product to reach their final decision. The t-score of 2.128 denoted that there was a significant difference between the perception of compensatory information processing and what really happened.

The last set of paired questions of significance in this comparison were alternative evaluation questions. When asked about product familiarity, the respondent perceptions significantly differed from what they really did. The t-score of 3.274 was the strongest significant difference throughout the study. The mean score of 3.722 for personal buying perceptions indicated that they agreed that the more they bought a product they were familiar with, the more aware they became of its various features, but should still research more before their next purchase to ensure they obtained the best buy. However, the mean score of 2.736 for the actual buying behavior indicated they would be less likely to consider the alternative evaluations of product familiarity.

TABLE VI
COMPARISON 3 - ACTUAL PERSONAL BUYING
VS PERSONAL BUYING PERCEPTIONS

QUESTION	GOVERNMENT		PERSONAL		T-TEST
	\bar{X}	S. D.	\bar{X}	S. D.	
Choice Criteria	4.368	0.597	4.052	0.705	1.489
Information Search	4.055	1.109	2.368	1.382	4.078 *
Degree of Information Search	3.421	0.837	3.631	1.011	0.698
Personality Factors	3.947	1.223	3.789	1.031	0.430
Personal Information Sources	3.578	1.017	3.157	1.067	1.244
Market Controlled Information	2.578	1.121	3.526	0.964	2.792 *
Compensatory Information Processing	4.263	0.805	3.631	1.011	2.128 *
Non-compensatory Information Processing	3.500	0.985	3.777	0.942	0.864
Alternative Evaluation-Product Familiarity	2.736	0.933	3.722	0.894	3.274 *
Alternative Evaluation-Number of Alternatives	3.263	0.805	3.722	1.227	1.352
Total T-test For Correlated Means (Overall, N=19)	35.315	4.784	34.789	6.205	0.292

* Significant at the .05 level.

As stated earlier, the overall t-score of 0.292 certified that in this major comparison of personal buying perceptions versus actual buying behavior, the difference between all of the comparisons was not significant. There was no difference in the way they perceived they bought and the way they actually bought.

Comparison 4 - Actual Government Buying vs Government Buying Perceptions

The purpose of this comparison was to determine if there was any difference in the way Air Force procurement buyers perceived how they bought for the government against how they actually bought for the government. Table VII is a summary of the respondents opinions from this comparison. The overall t-score of 0.091 certified that the overall difference in measures obtained in this comparison of twenty questions was not significant. Furthermore, of the ten paired questions in the areas of information search, degree of information search, information source processing, and alternative analysis relating to the consumer deliberation process, there were no differences between any of the paired questions. It can be concluded then, that there were not any differences in the way Air Force procurement buyers perceived how they bought for the government and how they actually bought for the government.

A glance at the t-scores listed on Table VII reveals there was only one set of paired questions that leaned

TABLE VII
COMPARISON 4 - ACTUAL GOVERNMENT BUYING
VS GOVERNMENT BUYING PERCEPTIONS

QUESTION	GOVERNMENT		PERSONAL		T-TEST
	\bar{X}	S. D.	\bar{X}	S. D.	
Choice Criteria	3.941	1.197	4.125	1.024	0.472
Information Search	4.000	1.105	3.562	1.412	1.027
Degree of Information Search	3.400	1.183	3.333	1.234	0.151
Personality Factors	3.588	1.000	3.705	1.159	0.316
Personal Information Sources	3.052	1.508	3.526	1.306	1.034
Market Controlled Information	3.666	1.137	3.500	1.339	0.402
Compensatory Information Processing	3.466	1.407	3.666	1.496	0.377
Non-compensatory Information Processing	2.866	1.355	2.500	1.344	0.730
Alternative Evaluation-Product Familiarity	3.111	1.323	3.444	1.247	0.777
Alternative Evaluation-Number of Alternatives	3.125	1.024	3.722	1.319	1.459
Total T-test For Correlated Means (N=19)	30.526	8.181	30.789	9.542	0.091

* Significant at the .05 level.

towards a tendency to be significant. When asked about buyer efficiency and the number of alternative products they would consider, the government buyers perceptions that they would consider a larger portion of the brands available to ensure they made the best possible buy or award for the Air Force was stronger than what actually happened. A look at the frequency of responses showed that 78% of the respondents either somewhat agreed or strongly agreed with the statement that even though a buyer may not be as timely or efficient, he/she should consider a larger portion of the brands that are available to ensure they made the best possible award for the Air Force Funds available. Conversely, only 44% actually agreed or strongly agreed with the same statement that that was in fact what they did. Note however, the t-score of 1.459 denoted that the difference between the two measures was not statistically significant.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to compare the purchase deliberations of U.S. Air Force procurement buyers to determine if there was any difference in the way they procured goods and services for the Air Force and the way they bought for themselves. Four major objectives were selected to achieve that purpose. They were: to compare what the Air Force buyers perceive they should do when they buy for the government with what they perceive they should do when they purchase for themselves; to compare what the Air Force buyers do when they buy for the government with what they do when they buy for themselves; to compare what the Air Force buyers do and what they perceive they should do when purchasing for themselves; and to compare what the Air Force buyers do and what they perceive they should do when purchasing for the Air Force.

The review of literature described some commercial or-
ganizational buying behavior studies. The studies, however,
were inconclusive as very few substantive generalizations
could be made. Knowing the complexity of gathering and
analyzing meaningful findings from each buyer organization's

infrastructure and networking, this research was attempted to offer an insight into a government organization buying activity. Although certainly not perfect in its design, it does add to the body of knowledge in consumer decision making.

The study was launched as a status descriptive study. An explanatory descriptive research design was chosen because the study was conducted to compare the individual's purchase deliberations for government and household buying. An opinion type survey was used to gather the data from the buyers. The target population consisted of twenty-four government buyers working in the procurement field. The sample used represented nineteen respondents for an overall response rate of 79%.

Buying perceptions for the government and the individual were analyzed along with actual buying behavior for the government and the individual. Response opinions were analyzed using descriptive statistics.

Summary Of Major Findings

In this study, ten questions were asked from four areas of the consumer decision process. The four areas within the consumer decision process used were: information search, degree of information search, information source processing, and alternative analysis. A total of twenty questions per objective were analyzed.

Of the four objectives listed in the introduction to

this chapter, only one proved to be significant. With an overall t-score of 2.202 the comparison between what the Air Force buyers do when they buy for the government versus what they do when they buy for themselves certified that the difference between the means was significant at the .05 level. Within this comparison, it was also proven that there was a significant difference in the effect on buyers from market controlled information when buying for themselves and when buying for the government. In this instance, the buyers felt that when they buy for the government, the market controlled information would have little effect on their purchases. The comparison also indicated that the market controlled information had more of an effect on their personal purchase than on their purchase for the government.

Of the remaining three objectives described above, none proved to be significant. However, within each of the remaining objectives, two had significant internal findings. Only the objective to compare what the Air Force buyers do and what they perceive they should do when purchasing for the Air Force had no statistically significant findings.

The two objectives that had significant findings within their comparisons were: objective one, to compare what the Air Force buyers perceive they should do when they buy for the government and what they perceive they should do when they purchase for themselves; and objective two, to compare what the Air Force buyers do and what they perceive they should do when purchasing for themselves.

Within objective one, the comparison of government buying perceptions versus personal buying perceptions, two areas proved to be significant. First, in the search for product information before the purchase, the buyers were more inclined to be brand loyal when buying for themselves than they were when buying for the government. Additionally, the Air Force buyers were more apt to research a priority and expensive buy for the government than they would when buying for themselves. Secondly, in the area of product information processing, the government buyers perceptions when buying for the government were more noncompensatory, and more compensatory when buying for themselves (see definitions in Chapter I, Decision Strategies).

Within objective three, actual personal buying versus personal buying perceptions, there were three areas that proved to be significant. First, the effect of market controlled information (advertising) had on their buying. In this area it was found that the buyers had the perception that advertising should help with their purchase decision, when in actuality it did not have as strong an effect as they thought it would. Secondly, the buyers perceived themselves to be less compensatory in their thinking than in their buyer behavior. However, in support of the finding in objective one above, they used compensatory decision strategies when buying for themselves. The third and last significant finding within this objective was in the area of alternative evaluations. The buyers perceived themselves as

doing more research even though they were familiar with the product they were buying. However, in actuality, their buying behavior indicated they would be less likely to do that research and more likely to buy the product they were familiar with.

Conclusions

In analyzing the major finding in relation to the second objective and in analyzing the other findings within three of the four objectives of the research study, several conclusions were drawn. However, given the complexity of government organizational buying and the fact that this was the first attempt to study government buyers, the conclusions should not be generalized beyond this sample.

Major differences were, nevertheless, found between government buying and personal buying behavior. This suggests the buyers purchase deliberations are different when buying for the government and when buying for themselves.

The fact that the market controlled information would have little effect on their government purchasing may mean that the buyers were as Dennis Gensch (1984) defined, manifesting a certain degree of supplier loyalty. However, as the next finding indicated they may not have been all that committed to that supplier, as they were more brand loyal when buying for themselves than when buying for the government. This was further borne out by the finding that the buyers were more apt to research a new buy for the govern-

ment than they would for themselves.

The methods that consumers use to process information can be defined as an intricate maze or wilderness at best. Further, it is still not completely researched. Therefore, it is difficult to understand the significance of the compensatory versus noncompensatory findings.

Within the third objective of actual personal buying versus personal buying perceptions, the fact that the buyers had the perception that advertising should help with their purchase decisions, when in actuality it did not have as strong an effect as they thought it would, falls in line with many other research studies that prove that advertising is not all that useful. Additionally, the finding that the buyers perceived themselves as doing more research even though they were familiar with the product they were buying, when in actuality, their behavior indicated they would be less likely to do that research and more likely to buy the product they are familiar with, was the same finding from other research. The buyers in this sample tended to be, like many others, brand loyal.

In summary, even though the generalizations were limited to this sample, the conclusions suggest a rather accurate portrait of a government buyer. The fact that there was not a difference in the way the buyers procured for the government and how they perceived they bought for the government is a strong indication they are following the established laws and regulations governing their profession. Future

studies should prove the validity of this estimation. The differences obtained between actual personal buying and actual government buying may suggest the lack of confinement and operability in private buying. The buyers certainly appeared to fit the mold of normal consumers.

Recommendations

The following recommendations may be examined for further research in the consumer decision making process and strategy. The recommendations were based on the result of this study, the related readings, and suggestions from others who were aware that this study was being conducted.

1. The instrument could be refined and the methods of implementation could be adopted to other government buying agencies, for example: other DOD activities, Government Services Agency, Department of Agriculture, state and local governments, as well as other industries.

2. This study should be restructured and applied to non-military government organizations to determine if Air Force regulations and requirements are contributing factors to the difference in their buyer behavior.

3. Future Air Force studies should look at the small purchase arena to determine the appropriateness of existing laws, regulations, and manning standards. The same study may want to look at the time allotted to complete a purchase.

4. This study should be redesigned to look at the buyer

decision process in high dollar government purchases.

5. This study should be expanded to determine the effect of post-purchase review within an organizational or government environment.

6. The instrument utilized in this study should be refined and tested in further research.

7. Future Air Force studies should address the impact of supplier loyalty on the quality and cost of goods and services provided. That same study could also address the usefulness of vendor promotional efforts and visits.

Based on the findings of this study, it is obvious that there is a need to expand and continue the research into government buying activities regulations, behavior, and organizational/industrial base networkings.

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APPENDIX

SURVEY QUESTIONNAIRE

1. If I have an important and expensive buy (i.e., wedding, birthday gift, etc.) but little time to compare, I shouldn't rely on brand, past experiences, store quality, and other factors but should seek new information and do some fact-finding.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>Freq (6)</u>	<u>(7)</u>	<u>(1)</u>	<u>(3)</u>	<u>(2)</u>
<u>Score 1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>

2. In order to compare the host of various products available against each others features, I do an extensive information search before making my purchase.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u> </u>	<u>(3)</u>	<u>(6)</u>	<u>(9)</u>	<u>(1)</u>

3. Before making a purchase for myself I do some serious fact-finding to help me make decisions about the products desirable features, i.e., color, dependability, flavor, texture, strength, size, etc.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u> </u>	<u> </u>	<u>(1)</u>	<u>(10)</u>	<u>(8)</u>

4. I enjoy shopping, researching, and comparing product features, before making a purchase for myself or my family.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(2)</u>	<u>(2)</u>	<u>(6)</u>	<u>(8)</u>

5. Before I make my decision to buy, I consider all of the products features and average the overall attributes to reach my final decision.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u> </u>	<u>(1)</u>	<u>(1)</u>	<u>(9)</u>	<u>(8)</u>

the \mathbb{R}^n -valued function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system (1.2).

As

$$A_1 = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 0 \end{pmatrix}, \quad A_2 = \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix},$$

the system (1.2) can be written in the form $\mathbf{f}' = A_1 \mathbf{f}$, where \mathbf{f} is a vector function.

Let us assume that \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$. Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system (1.1).

Conversely, let us assume that \mathbf{f} is a solution of the system (1.1). Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

Thus, the function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

Let us assume that \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$. Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system (1.1).

Conversely, let us assume that \mathbf{f} is a solution of the system (1.1). Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

Thus, the function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

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Thus, the function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

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Thus, the function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

Let us assume that \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$. Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system (1.1).

Conversely, let us assume that \mathbf{f} is a solution of the system (1.1). Then, according to the theorem of the uniqueness of the solution of the system of linear differential equations, the function \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

Thus, the function \mathbf{f} is a solution of the system (1.1) if and only if \mathbf{f} is a solution of the system $\mathbf{f}' = A_1 \mathbf{f}$.

6. If I have an important expensive buy (wedding, birthday gift, etc.) but little time to compare, I rely on brand, store quality, past experience and other factors instead of searching for new information or fact-finding.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(3)</u>	<u>(1)</u>	<u>(6)</u>	<u>(8)</u>

7. Even though I may not be as timely or efficient, I should consider a larger portion of the brands that are available to ensure that I get the best buy possible for my money.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(3)</u>	<u>(1)</u>	<u>(8)</u>	<u>(5)</u>

8. The more I buy a product I am familiar with, the more aware I am of its various features, but I should still research more before my next purchase to ensure I get the best buy.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(3)</u>	<u>(1)</u>	<u>(12)</u>	<u>(2)</u>

9. Before I make my decision to buy, I should consider each of the products features independently, then, the product with the best individual features is finally selected.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(3)</u>	<u>(1)</u>	<u>(11)</u>	<u>(3)</u>

10. Before I make my decision to buy, I consider each of the products features independently, and the product with the best individual features is finally selected.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(4)</u>	<u>(3)</u>	<u>(9)</u>	<u>(2)</u>

11. I should enjoy shopping, researching, and comparing product features before making a purchase for myself or my family.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(0)</u>	<u>(6)</u>	<u>(7)</u>	<u>(5)</u>

12. I often seek the counsel of neighbors, friends, and family before making my purchase.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(11)</u>	<u>(2)</u>

13. Before I make my decision to buy, I should consider all of the products features and average them together for the overall attributes of the product to reach my final decision.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(1)</u>	<u>(5)</u>	<u>(9)</u>	<u>(3)</u>

14. Before making a purchase for myself, I should do some serious fact-finding to help me make decisions about the products desirable features, i.e., color, dependability, flavor, texture, strength, size, etc.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(1)</u>	<u>(1)</u>	<u>(13)</u>	<u>(4)</u>

15. The more I buy a product I am familiar with, the more I am aware of its various features, which tends to make me research more before my next purchase.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(2)</u>	<u>(5)</u>	<u>(8)</u>	<u>(4)</u>	<u>(0)</u>

16. Advertisements from radio, television, newspapers, magazines, sales personnel, advertising brochures, and sales promotions (free samples) should help with my purchase decision.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(1)</u>	<u>(6)</u>	<u>(9)</u>	<u>(2)</u>

17. In order to compare the host of various products available against each others features, I should do an extensive information search before making my purchase.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(2)</u>	<u>(2)</u>	<u>(12)</u>	<u>(2)</u>

18. In order to make my buying more efficient, I will generally consider only a small portion of all the brands that are available even though there may be some brands not researched that are better.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(4)</u>	<u>(6)</u>	<u>(9)</u>	<u>(0)</u>

19. Advertisements from radio, television, newspapers, magazines, sales personnel, advertising brochures, and sales promotions (free samples) have little effect on my purchase decision.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(2)</u>	<u>(10)</u>	<u>(2)</u>	<u>(4)</u>	<u>(1)</u>

20. I should seek the counsel of neighbors, friends, and family before making my purchase.

STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(5)</u>	<u>(4)</u>	<u>(8)</u>	<u>(1)</u>

ASSUMPTIONS FOR GOVERNMENT BUYING ACTIONS

1. You have authority to buy "or equal" products/services.
2. The buy is for products or service whose value is from \$0.01 to \$999.99.
3. This is a normal procurement action.
4. Funding is available.
5. Verbal or mailout quotations are used.

1. Even though a buyer may not be as timely or efficient, he/she should consider a larger portion of the brands that are available to ensure they make the best possible award for the Air Force funds available.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
Freq. (1)	(2)	(2)	(0)	(9)	(5)
Score 0	1	2	3	4	5

2. Before buyers make their decision to buy, they should consider each of the products features independently, and the product with the best individual feature is finally selected.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
(5)	(4)	(4)	(2)	(3)	(1)

3. Before buyers make a decision to obligate government funds, they should consider all of the products features and average the overall attributes to reach their final decision.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
(4)	(1)	(4)	(1)	(2)	(7)

4. Before making an award for the Air Force the buyers should do some serious fact-finding to help them make decisions about the products desirable features, i.e., color, dependability, flavor, texture, strength, size, competitive range, etc.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(3)</u>	<u>(0)</u>	<u>(2)</u>	<u>(1)</u>	<u>(6)</u>	<u>(7)</u>

5. Buyers should often seek the counsel of their co-workers, contracting officer, and supervisors before finalizing their purchases.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(2)</u>	<u>(3)</u>	<u>(1)</u>	<u>(9)</u>	<u>(4)</u>

6. In order to compare the host of various products available against each others features, I do an extensive information search before making the award.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(4)</u>	<u>(1)</u>	<u>(2)</u>	<u>(5)</u>	<u>(4)</u>	<u>(3)</u>

7. If a buyer has a priority and expensive buy, but little time to compare, they should not only rely on brand, vendor quality, past experience, and other factors, but should take some time to search for new information and/or fact-finding.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(3)</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>	<u>(5)</u>	<u>(5)</u>

8. In order to make my buying more efficient, I will generally consider only a small portion of all the brands that are available, even though there may be some brands not researched that are better.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(3)</u>	<u>(0)</u>	<u>(6)</u>	<u>(3)</u>	<u>(6)</u>	<u>(1)</u>

9. Before I make a decision to obligate government funds, I consider all of the products features and average the overall attributes to reach my final decision.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(4)</u>	<u>(1)</u>	<u>(4)</u>	<u>(2)</u>	<u>(3)</u>	<u>(5)</u>

10. The more I buy a product I am familiar with, the more aware I become of its various features, which tends to make me research more before my next purchase.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(3)</u>	<u>(3)</u>	<u>(3)</u>	<u>(7)</u>	<u>(2)</u>

11. Before making an award for the Air Force I do some serious fact-finding to help me make decisions about the products desirable features, i.e., color, dependability, flavor, texture, strength, size, competitive range, etc.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(2)</u>	<u>(2)</u>	<u>(0)</u>	<u>(0)</u>	<u>(10)</u>	<u>(5)</u>

12. Advertisements from radio, television, newspapers, magazines, vendor sales personnel, vendor advertising brochures, and sales promotions (samples) have little effect on my purchase decision.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(0)</u>	<u>(4)</u>	<u>(3)</u>	<u>(6)</u>	<u>(5)</u>

13. If I have a priority and expensive buy, but little time to compare, I rely on brand, vendor quality, past experience and other factors instead of searching for new information or fact-finding.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(0)</u>	<u>(3)</u>	<u>(2)</u>	<u>(6)</u>	<u>(8)</u>

14. The more a procurement buyer buys a product they are familiar with, the more aware they should become of its various features, which should make them research more before their next purchase.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(1)</u>	<u>(4)</u>	<u>(3)</u>	<u>(6)</u>	<u>(4)</u>

15. I often seek the counsel of my co-workers, contracting officer and supervisors before finalizing my purchase.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(0)</u>	<u>(5)</u>	<u>(2)</u>	<u>(2)</u>	<u>(7)</u>	<u>(3)</u>

16. I enjoy researching, and doing a value analysis before obligating government funds for a procurement action (buy).

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(2)</u>	<u>(1)</u>	<u>(1)</u>	<u>(4)</u>	<u>(9)</u>	<u>(2)</u>

17. Before I make my decision to buy, I consider each of the products features independently, and the product with the best individual features is finally selected.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(4)</u>	<u>(3)</u>	<u>(3)</u>	<u>(4)</u>	<u>(3)</u>	<u>(2)</u>

18. Air Force procurement buyers should enjoy researching and doing a value analysis before obligating government funds for a government buy (award).

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(2)</u>	<u>(1)</u>	<u>(1)</u>	<u>(5)</u>	<u>(5)</u>	<u>(5)</u>

19. In order to compare the host of various products available against each others features, the government buyers should do an extensive information search before making the award.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(4)</u>	<u>(1)</u>	<u>(4)</u>	<u>(1)</u>	<u>(7)</u>	<u>(2)</u>

20. Advertisements from radio, television, newspapers, magazines, vendor sales personnel, vendor advertising brochures, and sales promotions (samples) should have little effect on a buyers purchase decision.

NOT BUYER'S PREROGATIVE	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE OR DISAGREE	SOMEWHAT AGREE	STRONGLY AGREE
<u>(1)</u>	<u>(1)</u>	<u>(5)</u>	<u>(1)</u>	<u>(6)</u>	<u>(5)</u>

VITA 2

Michael Dean Salisbury
Candidate for the Degree of
Master of Science

Thesis: A COMPARISON OF THE PURCHASE DELIBERATION PROCESS
OF U.S. AIR FORCE PROCUREMENT BUYERS WHEN BUYING
FOR THE AIR FORCE AND WHEN BUYING FOR THEMSELVES

Major Field: Housing, Interior Design and Consumer Studies

Biographical:

Personal Data: Born in Cheyenne, Wyoming, September
18, 1949, the first twin son of Lyle E. and
Olive Salisbury. Married to Vicki L. Nelson on
April 7, 1972.

Education: Graduated from C.L. McLane High School,
Fresno, California in June, 1968; received
Bachelor of Arts in Health Science from California
State University, Fresno in June, 1976; received
U.S. Air Force Reserve Officers Training Corps
(ROTC) commission and Distinguished Graduate
Honors in June, 1976; completed U.S. Air Force
Squadron Officers School in residence, Maxwell
AFB, Alabama, July, 1982; and graduated from Air
Command and Staff College, Tinker AFB, Oklahoma
in December 1984; Completed requirements for the
Master of Science Degree at Oklahoma State
University in May, 1985.

Professional Experience: U.S. Air Force Airborne
Electronic Sensor Systems Repairman (Lockheed
U-2), Vietnam Veteran, July, 1968 - June, 1972;
and Transportation and Traffic Management Officer,
January, 1977 - present.

Professional Organizations: Evangelical Free Church of
America and Air Force Association (AFA).

